

Amendments to the Drawings:

Figure 2A has been amended to depict a container (see attached Replacement Sheet). The container has been labeled as “29”.

REMARKS

I. Claim Status

Upon entry of the above amendments, claims 18-20, 23, 25-67, 69, and 71-108 will be pending.

Claims 1-17, 21-22, 24, 68, and 70 have been canceled.

Claims 18-20, 23, 25-39, 58, 64-67, and 75 have been amended.

Claim 86-108 have been added.

Support for the amendments and added claims can be found throughout the specification and original claims such as, for example, page 13, line 15 (persulfate), page 14, line 30 to page 15, line 25 (hydroxyl radicals), page 16, lines 12-16 (ozone concentrations and flow rates), page 14, lines 17-29 (organic contaminants including PCPs and NVOCs), page 22, lines 3-6 (petroleum hydrocarbons as contaminants), page 13, lines 25-31 (use of containers with system and methods), page 13, lines 12-19 (reagents for the systems and methods), page 16, lines 9-12 (use of systems and methods to remediate absorbed phase contaminants), page 1, lines 24-25 (treatment of soil), page 2, lines 23-25 (methods of treating a body of water and/or soil), and page 10, lines 20-25 (grout or bentonite as compositions of the diffusion barrier). No new matter has been introduced.

II. Specification

The specification has been amended to include the language of claim 28, as originally filed. It is well-established that the specification may be amended with the subject matter of the claims, since claims are considered part of the disclosure. MPEP § 2163.06. Applicant, therefore, respectfully requests entry of the amendment.

The specification also has been amended to refer to the container in amended Figure 2A by its label "29". Applicant respectfully requests entry of this amendment.

III. Drawings

The drawings are objected to for allegedly failing to show every feature of the invention specified in the claims. In particular, the Examiner alleges that the drawings fail to show a

container. Applicants have amended Figure 2A to show a container, labeled "29". The container is an optional feature present in some of the embodiments of the invention. Applicant respectfully requests withdrawal of the objection to the drawings.

IV. Allowable Subject Matter

Applicant thanks the Examiner for indicating that the subject matter of claims 39-57, 81, and 82 is allowable. Applicant further believes that the amendments to the claims have overcome the objection to claims 81 and 82 as being dependent on a rejected base claim. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection to claims 81 and 82.

V. Rejection under 35 USC 102(b)

Claims 1-38, 58-80, and 83-85 stand rejected under 35 USC 102(b) as allegedly being anticipated by U.S. Pat. No. 6,210,073 (herein Buehlman patent). Applicant respectfully traverses the rejection because the Buehlman patent fails to teach or suggest all of the elements of the claimed subject matter.

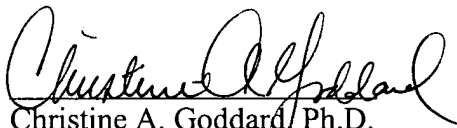
The presently claimed systems and methods of the invention operate in such a way that the injected reagents contact each other outside the bore hole and react to form hydroxyl radicals which, in turn, react with contaminants in the area being treated. Buehlman reports a number of reagents, but does not teach or suggest selection of reagents that would result in the formation of hydroxyl radicals outside the bore hole. Instead, Buehlman appears to report reagents only for "direct oxidation" (see col. 3, lines 6-8), not indirect oxidation via hydroxyl radicals as is characteristic of the presently claimed systems and methods.

Buehlman fails to teach or suggest other elements of the present invention. For example, while use of a gaseous or liquid oxidant appears to be reported, Buehlman fails to teach or suggest the specific use of hydrogen peroxide as a liquid reagent. Additionally, while Buehlman reports use of ozone, Buehlman fails to teach or suggest the relatively high concentrations and flow rates characteristic of certain aspects of the present invention. Accordingly, the claims cannot be anticipated by Buehlman. Applicant respectfully requests reconsideration and withdrawal of the rejection of the claims under 35 USC 102(b).

V. Conclusion

In view of the foregoing, Applicant submits that the claims as amended are in condition for allowance, and an early Office Action to that effect is earnestly solicited. The Commissioner is hereby authorized to charge any fee or underpayment thereof or credit any overpayment to deposit account no. 50-1275.

Respectfully submitted,



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